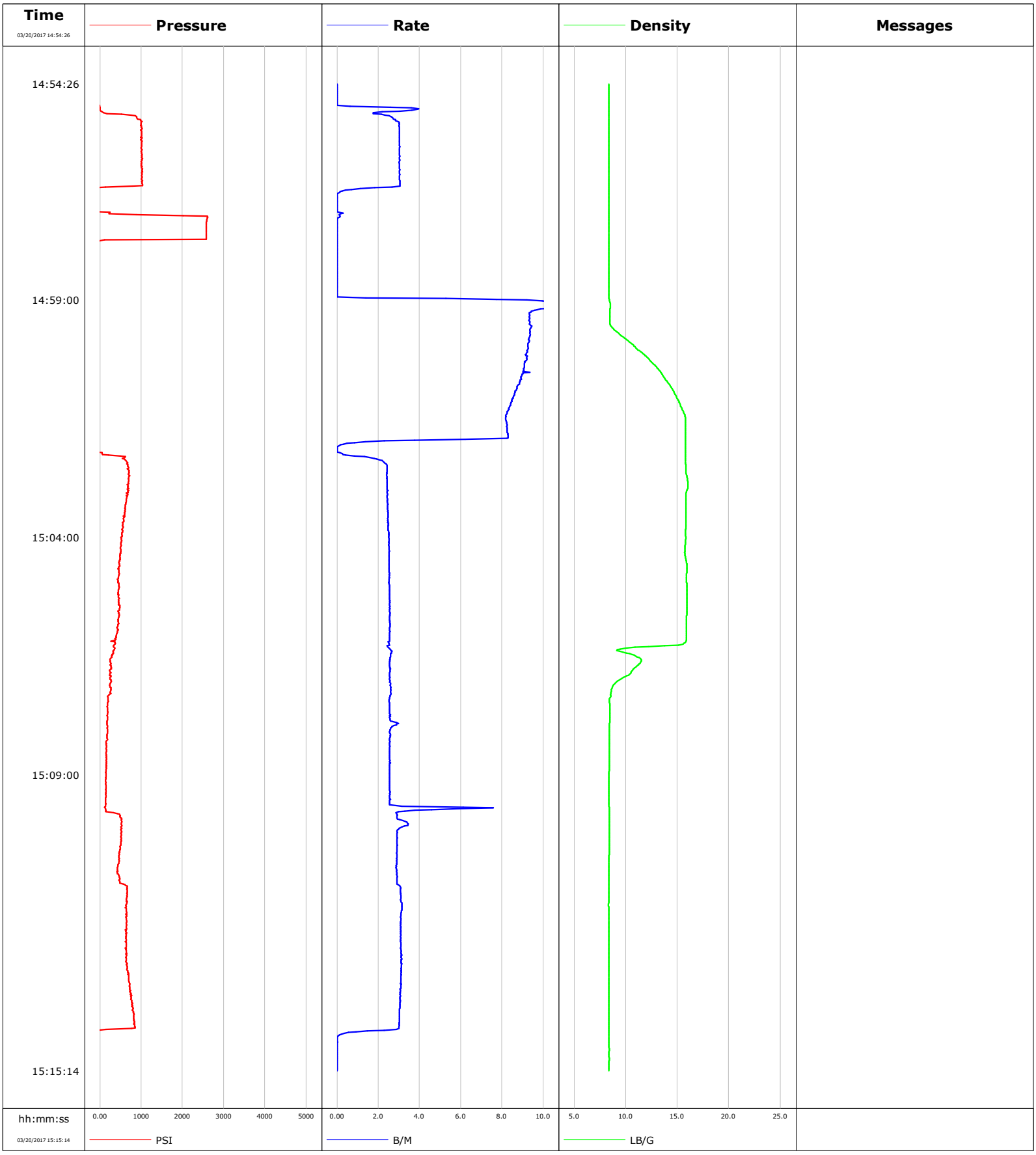
Schlumberger

Cementing Job Report

Well	Briggs 1-12 A	**Client**	Anadarko
Field	DJ	**SIR No.**	da6t-00735
Engineer	Scot Thornton	**Job Type**	Nio
Country	United States	**Job Date**	03-20-2017



Schlumberger Cementing Service Report

Customer	Job Number
Anadarko	da6t-00735

Well	Location (legal)	Schlumberger Location	Job Start
Briggs 1-12 A			Mar/20/2017

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	in	ft	ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
	Colorado	psi	degF	degF	lb/gal

Well Master	API/UWI

Rig Name	Drilled For	Service Via
	N/A	Land

Offshore Zone	Well Class	Well Type
	Old	Workover

Drilling Fluid Type	Max. Density	Plastic Viscosity
	lb/gal	cP

Service Line	Job Type
Cementing	Nio

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	2 3/8" 4.7# T/S

Service Instructions

Pump 5 bbl water
Pressure Test 2500
Pump 10.9 bbl cement @ 15.8 ppg (40 sks @ 1.53 yield)
Displace 23 bbl water

Est TOC: 6519

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
T	7220.0	2.4	4.7		
	0.0	0.0	0.0		

Perforations/Open Hole

Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval
ft	ft			ft
ft	ft			Diameter
ft	ft			in

Treat Down	Displacement	Packer Type	Packer Depth
Tubing	bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	bbl	bbl	bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
X	X

Lift Pressure	psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs

Cement Head Type

Job Scheduled For	Arrived on Location	Leave Location
Mar/20/2017 13:00	Mar/20/2017 13:00	Mar/20/2017

Casing Tools		Squeeze Job	
Shoe Type		Squeeze Type	
Shoe Depth	ft	Tool Type	
Stage Tool Type		Tool Depth	ft
Stage Tool Depth	ft	Tail Pipe Size	in
Collar Type		Tail Pipe Depth	ft
Collar Depth	ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
03/20/2017	14:54:26	-51	0.0	8.38	0.0	Started Acquisition
03/20/2017	14:58:36	-65	0.0	8.39	5.1	
03/20/2017	15:02:46	686	2.4	15.98	6.2	
03/20/2017	15:06:56	265	2.6	9.95	16.7	
03/20/2017	15:11:06	448	2.9	8.38	28.3	

Post Job Summary

Average Pump Rates, bbl/min			
Slurry	N2	Mud	Maximum Rate
3.7			4.0

Volume of Fluid Injected, bbl			
Total Slurry	Mud	Spacer	N2
10.8	0.0	5.0	

Treating Pressure Summary, psi				
Maximum	Final	Average	Bump Plug to	Breakdown
2608	-65	590		

Breakdown Fluid		
Type	Volume	Density
	bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp
%	0.0 bbl	23.0 bbl	degF

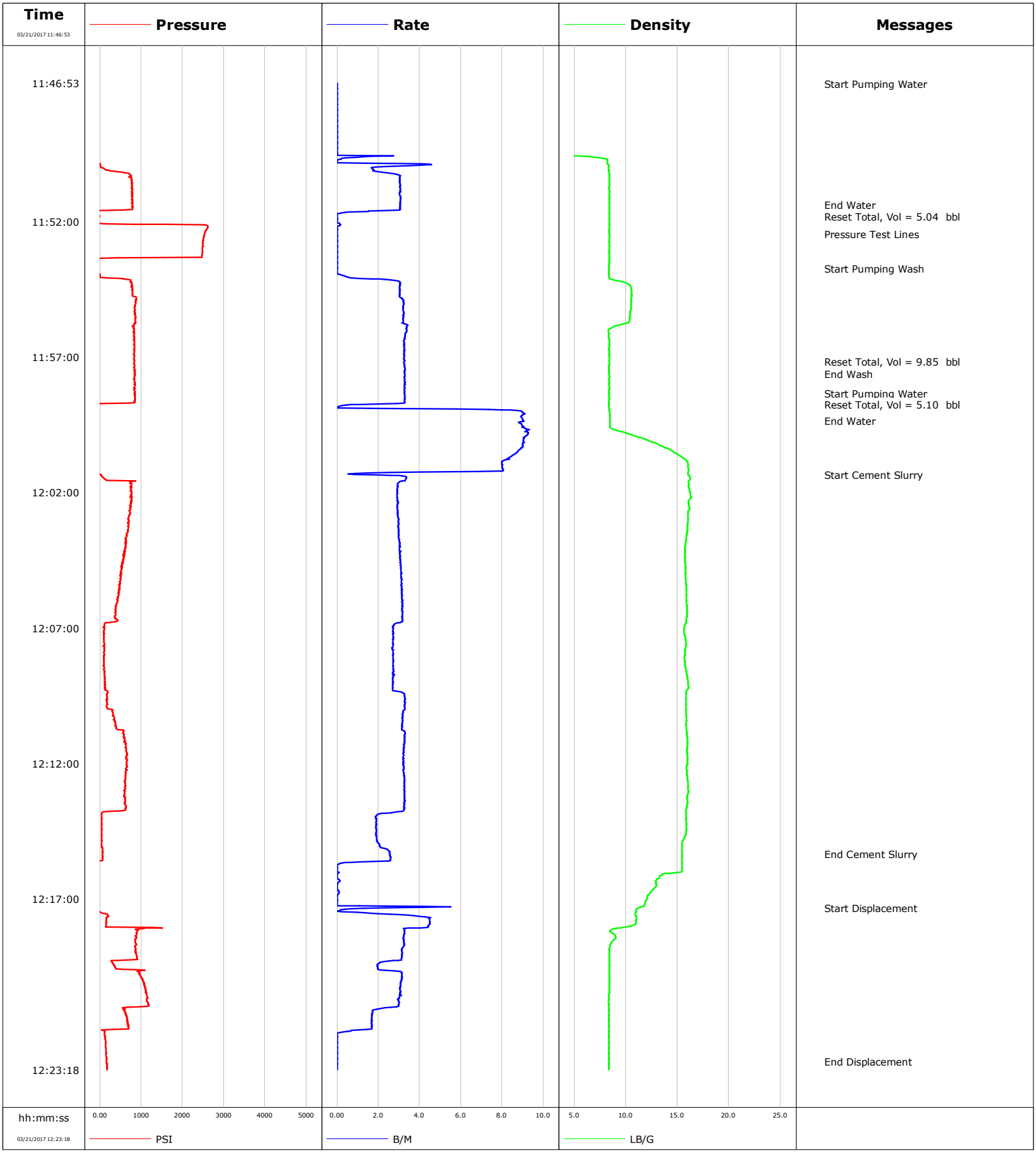
Cement Circulated to Surface?	Volume
☐	bbl
Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Edgar Chavez	Scot Thornton	-	X -

Schlumberger

Cementing Job Report

Well	Briggs 1-12A	**Client**	Anadarko
Field	DJ	**SIR No.**	DA6T-00736
Engineer	Richard White	**Job Type**	Plug Abandon
Country	United States	**Job Date**	03-21-2017



Schlumberger Cementing Service Report

Customer	Job Number
Anadarko	DA6T-00736

Well	Location (legal)	Schlumberger Location	Job Start
Briggs 1-12A 1-12A	CWY	Cheyenn	Mar/21/2017

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	in	4410.0 ft	4410.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	165 degF	165 degF	lb/gal

Well Master	API/UWI
630386386	51231678

Rig Name	Drilled For	Service Via
Basic 1652	Oil & Gas	Land

Offshore Zone	Well Class	Well Type
	Old	Other

Drilling Fluid Type	Max. Density	Plastic Viscosity
Other	8.40 lb/gal	cP

Service Line	Job Type
Cementing	Plug & Abandon

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	2 3/8" 4.7# T/S

Service Instructions

Sussex Sqz. water and cmt checked and verified
Est. top of cmt @ 3841 ft
5 bbl water
10 bbl SMS
5 bblwater
43 bbl cmt@ 15.8ppg 1.51cuft/ft 160sks 6.35gal/sk
12.6 bbl Disp.

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
4410.0	4.5	11.6	N80	BUTT
0.0	0.0	0.0		

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
T	4410.0	2.4	4.7	N/A	N/A
	0.0	0.0	0.0		

Perforations/Open Hole

Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval
ft	ft			ft
ft	ft			Diameter
ft	ft			in

Treat Down	Displacement	Packer Type	Packer Depth
Tubing	bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	bbl	bbl	bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement	Lift Pressure	Pipe Rotated	Pipe Reciprocated	No. Centralizers	Top Plugs	Bottom Plugs	Cement Head Type
☐	☐	psi	☐	☐				

Job Scheduled For	Arrived on Location	Leave Location
Mar/21/2017	Mar/21/2017	Mar/21/2017

Casing Tools		Squeeze Job	
Shoe Type		Squeeze Type	
Shoe Depth	ft	Tool Type	
Stage Tool Type		Tool Depth	ft
Stage Tool Depth	ft	Tail Pipe Size	in
Collar Type		Tail Pipe Depth	ft
Collar Depth	ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume NULL	Message
03/21/2017	11:46:53	-56	0.0	0.11	10	Started Acquisition
03/21/2017	11:46:55	-56	0.0	0.11	10	Start Pumping Water
03/21/2017	11:48:53	-56	0.0	0.11	10	
03/21/2017	11:50:53	782	0.9	8.40	5	
03/21/2017	11:51:23	782	0.9	8.40	5	End Water
03/21/2017	11:51:41	-60	0.0	8.40	12	Reset Total, Vol = 5.04 bbl
03/21/2017	11:52:27	2535	0.0	8.40	10	Pressure Test Lines
03/21/2017	11:52:53	2489	0.0	8.39	10	
03/21/2017	11:53:44	-51	0.0	8.39	10	Start Pumping Wash
03/21/2017	11:54:53	864	1.0	10.55	5	
03/21/2017	11:56:53	823	1.0	8.40	5	
03/21/2017	11:57:11	832	1.0	8.40	12	Reset Total, Vol = 9.85 bbl
03/21/2017	11:57:20	837	1.0	8.39	5	End Wash
03/21/2017	11:58:20	855	1.0	8.39	5	Start Pumping Water
03/21/2017	11:58:45	-70	0.0	8.39	12	Reset Total, Vol = 5.10 bbl
03/21/2017	11:58:53	-65	0.0	8.39	10	
03/21/2017	11:59:20	-65	0.0	8.47	10	End Water
03/21/2017	12:00:53	-60	0.0	16.00	10	
03/21/2017	12:01:20	27	0.0	16.05	5	Start Cement Slurry
03/21/2017	12:02:53	695	0.9	16.01	5	
03/21/2017	12:04:53	512	0.9	15.79	5	

Well	Field	Job Start	Customer	Job Number
Briggs 1-12A 1-12A	DJ	Mar/21/2017	Anadarko	DA6T-00736

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume NULL	Message
03/21/2017	12:08:53	123	0.8	15.99	5	
03/21/2017	12:10:53	558	1.0	15.92	5	
03/21/2017	12:12:53	608	1.0	16.04	5	
03/21/2017	12:14:53	40	0.5	15.49	5	
03/21/2017	12:15:20	68	0.5	15.47	5	End Cement Slurry
03/21/2017	12:16:53	-56	0.0	12.14	10	
03/21/2017	12:17:20	-56	0.0	11.26	10	Start Displacement
03/21/2017	12:18:53	855	0.9	8.40	5	
03/21/2017	12:20:53	1171	0.9	8.36	5	
03/21/2017	12:22:53	159	0.0	8.38	10	

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
3.3			9.3	74.8	0.0	0.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2617	173	620				bbl	lb/gal

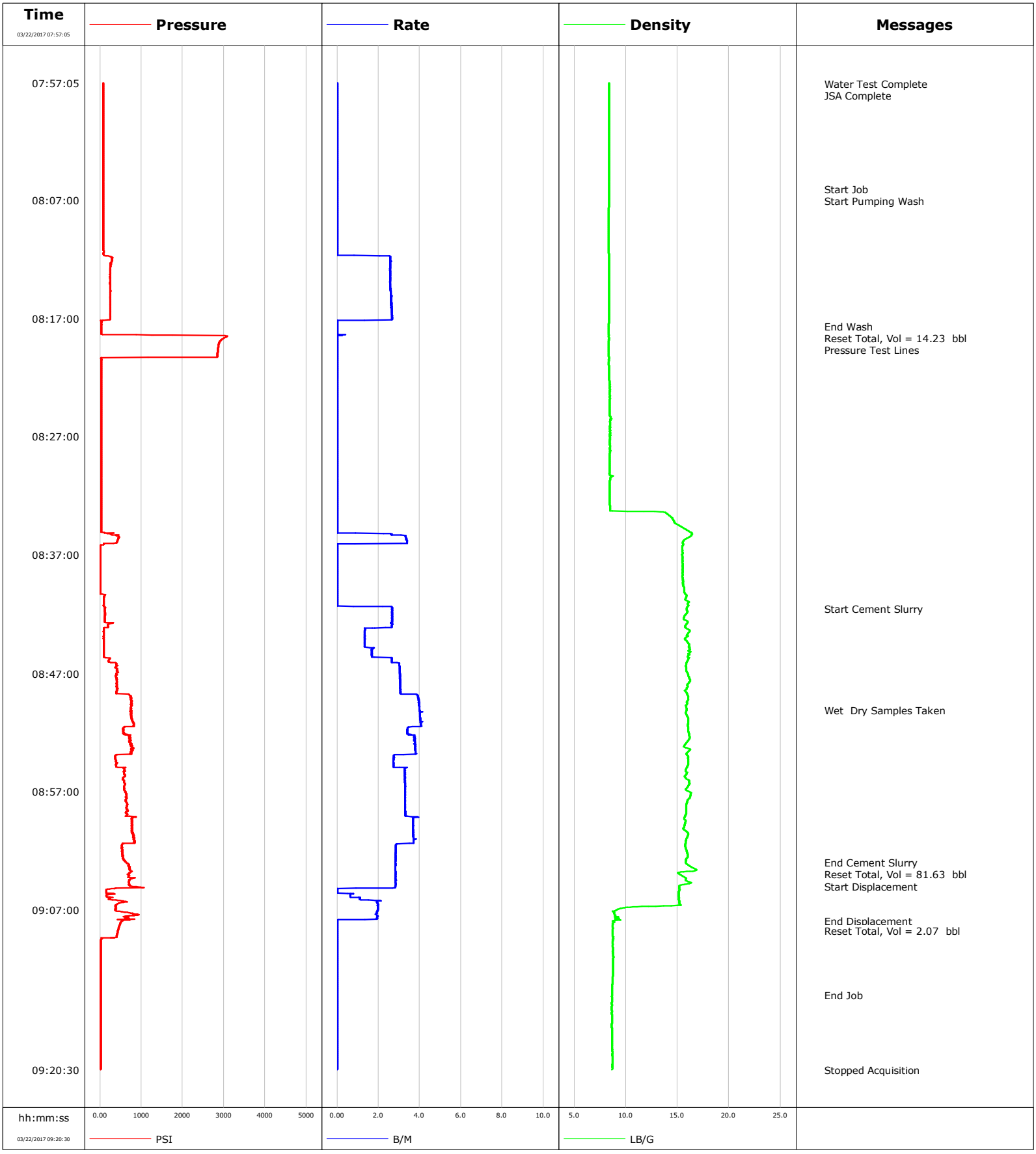
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	0.0 bbl	0.0 bbl	degF	Cement Circulated to Surface? ☐	Volume bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor		
Edgar Chavez	Richard White	Circulation Lost ☐	Job Completed ☐
		-	-

Schlumberger

Cementing Job Report

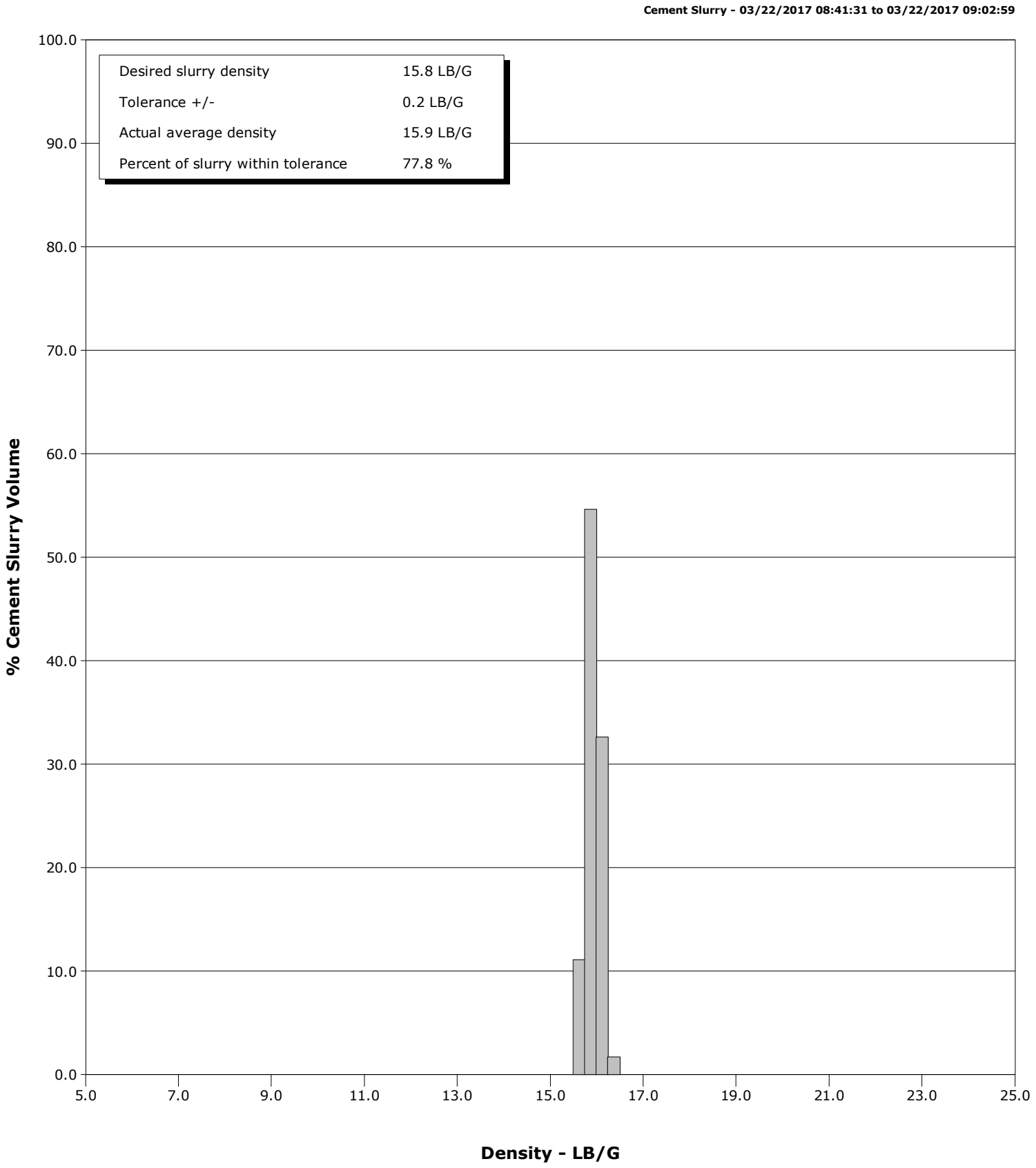
Well	BRIGGS 1-12A	**Client**	ANADARKO
Field	DJ	**SIR No.**	DA6T-00737
Engineer	Wayne Silvester	**Job Type**	Stub Plug
Country	United States	**Job Date**	03-22-2017



Schlumberger

Cementing Qa/Qc Density Report

Well	BRIGGS 1-12A	**Client**	ANADARKO
Field	DJ	**SIR No.**	DA6T-00737
Engineer	Wayne Silvester	**Job Type**	Stub Plug
Country	United States	**Job Date**	03-22-2017



Schlumberger Cementing Service Report

Customer	Job Number
ANADARKO	DA6T-00737

Well	Location (legal)	Schlumberger Location	Job Start
BRIGGS 1-12A	217304	Cheyenne	Mar/22/2017

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	in	1040.0 ft	1040.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	90 degF	80 degF	lb/gal

Well Master	API/UWI
0630386386	512316780

Rig Name	Drilled For	Service Via
	Oil & Gas	Land

Offshore Zone	Well Class	Well Type
	Old	Workover

Drilling Fluid Type	Max. Density	Plastic Viscosity
	lb/gal	cP

Service Line	Job Type
Cementing	Stub Plug

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	2 3/8" 4.7# T/S

Service Instructions

Stub Plug = 395 sks 1.16 ft3/sk 5.115 gps = 81.6 bbls

Est Toc= 100 ft

CW7 15 bbls
CMT 81.6 bbls
Displace 1 bbls

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
1040.0	4.5	11.6	N/A	N/A
402.0	8.6	24.0	N/A	N/A

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
T	1040.0	2.4	4.7	N/A	N/A
	0.0	0.0	0.0		

Perforations/Open Hole

Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval
ft	ft			ft
ft	ft			Diameter
ft	ft			in

Treat Down	Displacement	Packer Type	Packer Depth
Tubing	2.0 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
3.0 bbl	bbl	50.0 bbl	29.0 bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
X	X

Lift Pressure	psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs

Cement Head Type

Job Scheduled For	Arrived on Location	Leave Location
Mar/22/2017	Mar/22/2017	Mar/22/2017

Casing Tools		Squeeze Job	
Shoe Type		Squeeze Type	
Shoe Depth	ft	Tool Type	
Stage Tool Type		Tool Depth	ft
Stage Tool Depth	ft	Tail Pipe Size	in
Collar Type		Tail Pipe Depth	ft
Collar Depth	ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume BBL	Pressure PSI	Message
03/22/2017	07:57:05	0.0	8.38	0.0	81	Started Acquisition
03/22/2017	07:57:08	0.0	8.38	0.0	81	Water Test Complete
03/22/2017	08:02:06	0.0	8.37	0.0	81	
03/22/2017	08:06:04	0.0	8.36	0.0	81	Start Job
03/22/2017	08:06:07	0.0	8.36	0.0	81	Start Pumping Wash
03/22/2017	08:07:07	0.0	8.36	0.0	81	
03/22/2017	08:12:08	2.6	8.37	1.1	292	
03/22/2017	08:17:09	1.3	8.36	14.2	91	
03/22/2017	08:17:40	0.0	8.34	14.2	36	End Wash
03/22/2017	08:17:41	0.0	8.34	14.2	36	Reset Total, Vol = 14.23 bbl
03/22/2017	08:19:09	0.0	8.34	14.3	2874	Pressure Test Lines
03/22/2017	08:22:10	0.0	8.37	14.3	36	
03/22/2017	08:27:11	0.0	8.44	14.3	36	
03/22/2017	08:32:12	0.0	8.41	14.3	36	
03/22/2017	08:37:13	0.0	15.50	17.0	8	
03/22/2017	08:41:31	2.7	15.90	17.5	118	Start Cement Slurry
03/22/2017	08:42:14	2.7	15.64	19.4	118	
03/22/2017	08:47:15	3.0	16.06	30.1	393	
03/22/2017	08:50:06	4.0	15.88	40.0	741	Wet Dry Samples Taken
03/22/2017	08:52:16	3.8	16.14	48.3	690	
03/22/2017	08:57:17	3.3	16.25	65.0	626	

Well	Field	Job Start	Customer	Job Number
BRIGGS 1-12A	DJ	Mar/22/2017	ANADARKO	DA6T-00737

Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume BBL	Pressure PSI	Message
03/22/2017	09:02:59	2.8	15.81	84.0	654	End Cement Slurry
03/22/2017	09:03:01	2.8	15.79	84.1	645	Reset Total, Vol = 81.63 bbl
03/22/2017	09:03:03	2.8	15.82	84.2	649	Start Displacement
03/22/2017	09:07:19	1.9	8.87	92.9	796	
03/22/2017	09:07:57	0.0	8.69	93.9	530	End Displacement
03/22/2017	09:08:47	0.0	8.71	93.9	429	Reset Total, Vol = 2.07 bbl
03/22/2017	09:12:20	0.0	8.76	93.9	13	
03/22/2017	09:14:12	0.0	8.67	93.9	17	End Job
03/22/2017	09:17:21	0.0	8.67	93.9	17	

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
2.9			4.1	81.6	0.0	15.3	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3080	17	285				bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	81.6 bbl	2.1 bbl	55 degF	Cement Circulated to Surface? ☐	Volume bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor		
		Circulation Lost ☐	Job Completed ☒
Edgar Chavez	Wayne Silvester	-	-